

REMARKS

Prior to entry of this amendment, claims 1-18 are pending in the subject application.

Claims 13-18 are withdrawn from consideration. Claim 1 is the only independent claim.

Applicants appreciate the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants further appreciate the Examiner's acceptance of the original drawings filed on February 9, 2004.

Applicants further appreciate the Examiner's consideration of applicants' Information Disclosure Statements filed February 9, 2004, September 13, 2004, and May 24, 2005.

Claims 1-12 are presented to the Examiner for further consideration on the merits.

A. Introduction

In the outstanding, non-final Office action, the Examiner rejected claims 1-12 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 5, 6, 8 and 9 of U.S. Patent No. 6,886,919 to Lim et al. ("the Lim et al. reference") in view of U.S. Patent No. 5,841,452 to Silverbrook ("the Silverbrook reference") and U.S. Patent No. 5,710,070 to Chan ("the Chan reference"); rejected claims 1, 2, 3, 5, 6 and 8 under 35 U.S.C. § 102(b) as being anticipated by the Silverbrook reference; rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over the Silverbrook reference in view of the Chan reference; and rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over the Silverbrook reference in view of U.S. Patent Publication No. 2002/0008738 to Lee et al. ("the Lee et al. reference").

B. Obviousness-Type Double Patenting of Claims 1-12

In the outstanding, non-final Office action, the Examiner rejected claims 1-12 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 5, 6, 8 and 9 of the Lim et al. reference in view of the Silverbrook and the Chan references. Applicants respectfully traverse this rejection, for at least the following reasons.

If the application at issue is the later filed application (i.e., the Lim et al. reference has a U.S. filing date of October 21, 2003, versus the instant application has a U.S. filing date of February 9, 2004), only a one-way determination of obviousness is needed in resolving the issue of double patenting. MPEP §804(II)(B)(1)(a). *The test is whether the invention defined in a claim in the application is an obvious variation of the invention defined in a claim in the patent.* *Id.* (Emphasis added).

While applicants appreciate the Examiner's attempt to set forth the grounds of rejection in a clear and understandable way, the grounds of rejection are nevertheless deficient. MPEP §804(II)(B)(1)(b), states that “[a]ny obviousness-type double patenting rejection should make clear: (A) *The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent*” (emphasis added).

In view of the guidelines of the MPEP, applicants submit that the grounds of rejection fail to support the double patenting rejection. For example, the grounds of rejection regarding base claim 1 set forth Table 1, on pages 3 and 4 of the Office action, which recites claim 1 of the Lim et al. reference and claim 1 of the instant application in a side-by-side fashion, and a conclusory statement on page 6 of the Office action, that claim 1 of the Lim et al. reference contains “the

basic elements of the claimed limitations of the pending application except for the restrictor having a length....” Accordingly, the grounds of rejection fail to provide *any* analysis or discussion as to the reasons why one of ordinary skill in the art would conclude that the ink-jet printhead of claim 1 of the instant application is an obvious variation of the printhead of claim 1 defined in the Lim et al. reference. Additionally, applicants respectfully disagree that such reasons are “readily apparent” based only on Table 1. Rather, applicants respectfully submit that it is readily apparent that claim 1 of the instant application is *not* an obvious variant of claim 1 of the Lim et al. reference, as discussed more fully below.

Upon careful review of claims 1, 2, 4, 5, 6, 8 and 9 of the Lim et al. reference and claims 1-12 of the instant application, applicants note the following. Applicants respectfully submit that claims 1, 2, 4, 5, 6, 8 and 9 of the Lim et al. reference are *silent* as to a printhead comprising “*a restrictor, which is a path through which ink is supplied from an ink reservoir to the ink chamber, perforating a bottom surface of the substrate and a bottom surface of the ink chamber,*” as recited in claim 1 of the instant application. Applicants submit that the Examiner has overlooked the distinctive structural features of this recitation, in view of the manifold, ink channel and ink chamber of claim 1 of the Lim et al. reference, as well as, for example, paragraph [0041] of the instant application. For at least these reasons, applicants submit that the restrictor is not even suggested by claims 1, 2, 4, 5, 6, 8 and 9 of the Lim et al. reference. Accordingly, the ink-jet printhead having, *inter alia*, a restrictor as claimed in claims 1-12 cannot be an obvious variation of claims 1, 2, 4, 5, 6, 8 and 9 of the Lim et al. reference.

Applicants also incorporate by reference herein, the traversal of the Silverbrook reference and the Chan reference, as set forth below in applicants’ response to the claim rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a).

When considering the Lim et al. reference, the Silverbrook reference, and the Chan reference, individually and in combination, they fail to teach or suggest all of the elements of the ink-jet printhead as claimed in claim 1. In view of the above, applicants respectfully submit that the grounds of rejection fail to establish a *prima facie* case of nonstatutory obviousness-type double patenting for claim 1. Since claims 2-12 of the instant application are at least patentable by virtue of their dependency on claim 1, applicants respectfully request that the rejection of claims 2-12 under nonstatutory obviousness-type double patenting also be withdrawn.

C. Asserted Anticipation Rejection of Claims 1, 2, 3, 5, 6 and 8

In the outstanding, non-final Office action, the Examiner rejected claims 1, 2, 3, 5, 6 and 8 under 35 U.S.C. § 102(b) as being anticipated by the Silverbrook reference. Applicants respectfully traverse this rejection, for at least the following reasons.

Claim 1 recites, *inter alia*, an ink chamber, a restrictor, and an ink reservoir. The grounds of rejection set forth that Figures 6-9 of the Silverbrook reference illustrate these elements. In particular, the grounds of rejection set forth that the nozzle cavity 112 of the Silverbrook reference corresponds to the claimed ink chamber *and* the claimed ink reservoir; the barrel 113 of the Silverbrook reference corresponds to the claimed ink chamber; and the nozzle channel 114 of the Silverbrook reference corresponds to the claimed restrictor (page 8, lines 3-6, of the Office action)(*emphasis added*). Applicants respectfully note that the grounds of rejection are confusing, because the Examiner has stated that the nozzle cavity 112 of the Silverbrook reference corresponds to *both* the ink chamber and the ink reservoir. Further, the Examiner has stated that barrel 113 corresponds to the ink chamber. Regardless of the deficiencies in the grounds of rejection and failure to establish a *prima facie* case of anticipation, applicants respectfully disagree that the Silverbrook reference discloses the ink-jet printhead of claim 1.

Claim 1 recites, *inter alia*, “a restrictor, which is a path through which ink is supplied from an ink reservoir to the ink chamber....” Hence, the restrictor is between the ink reservoir and the ink chamber. However, assuming *arguendo*, that the nozzle channel 114 of the Silverbrook reference corresponds to the restrictor of claim 1, the nozzle channel 114 does *not* provide a path through which ink is supplied from the nozzle cavity 112 to the barrel 113, as advanced in the grounds of rejection (*see e.g.*, Figures 6-9 of the Silverbrook reference).

Alternately, assuming *arguendo* that the barrel 113 of the Silverbrook reference corresponds to the restrictor of claim 1, such an interpretation would also be incorrect. Claim 1 recites, *inter alia*, that the restrictor perforates “*a bottom surface of the substrate.*” However, the barrel 113 does not perforate a bottom surface of substrate 130 (*see Figures 6-9 of the Silverbrook reference*). Accordingly, the barrel 113 can not correspond to or disclose the restrictor of claim 1. Additionally, if the barrel 113 corresponds to the claimed restrictor, the nozzle channel 114 of the Silverbrook reference can not correspond to the ink reservoir of claim 1. Indeed, applicants respectfully submit that such an interpretation would contradict how those skilled in the art would interpret an ink reservoir.

For at least these reasons, applicants respectfully submit that the Silverbrook reference fails to disclose or suggest all of the elements of the ink-jet printhead as claimed in claim 1. Accordingly, applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn. Since claims 2, 3, 5, 6 and 8 are patentable at least by virtue of their dependency on claim 1, applicants respectfully request that the rejection of claims 2, 3, 5, 6, and 8 under 35 U.S.C. § 102(b) also be withdrawn.

D. Asserted Obviousness Rejection of Claim 4

In the outstanding, non-final Office action, the Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over the Silverbrook reference in view of the Chan reference. Applicants respectfully traverse this rejection, for at least the following reasons.

The Chan reference fails to compensate for the deficiencies of the Silverbrook reference. Accordingly, the Chan reference and the Silverbrook reference, individually or in combination, fail to teach or suggest all of the elements of the ink-jet printhead as claimed in claim 1. Since claim 4 is patentable at least by virtue of its dependency on claim 1, applicants respectfully request that the rejection of claim 4 under 35 U.S.C. § 103(a) also be withdrawn.

E. Asserted Obviousness Rejection of Claim 7

In the outstanding, non-final Office action, the Examiner rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over the Silverbrook reference in view of the Lee et al. reference. Applicants respectfully traverse this rejection, for at least the following reasons.

The Lee et al. reference fails to compensate for the deficiencies of the Silverbrook reference. Accordingly, the Lee et al. reference and the Silverbrook reference, individually or in combination, fail to disclose or suggest all of the elements of the ink-jet printhead as claimed in claim 1. Since claim 7 is patentable at least by virtue of its dependency on claim 1, applicants respectfully request that the rejection of claim 7 under 35 U.S.C. § 103(a) also be withdrawn.

F. Conclusion

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.